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10/568,176	11/30/2006	Howard J. Smith	P1119/20001	5589

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CAESAR, RIVISE, BERNSTEIN,
COHEN & POKOTILOW, LTD.
11TH FLOOR, SEVEN PENN CENTER
1635 MARKET STREET
PHILADELPHIA, PA 19103-2212

EXAMINER	
LUCAS, ZACHARIAH	
ART UNIT	PAPER NUMBER
1648	

NOTIFICATION DATE	DELIVERY MODE
10/22/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@crbcp.com

Office Action Summary	Application No.	Applicant(s)	
	10/568,176	SMITH, HOWARD J.	
	Examiner	Art Unit	
	ZACHARIAH LUCAS	1648	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,6,9-23,27,29-31,33,36 and 38-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 5, 6, 9-23, 27, 29-31, 33, 36, 38-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 5, 6, 9-23, 27, 29-31, 33, 36, 38-43 are pending and under consideration in the application.

2. In the prior action, mailed on March 20, 2008, claims 1-43 were pending and rejected.

3. In the amendment of July 21, 2008, the Applicant cancelled claims 2-4, 7, 8, 24-26, 28, 32, 34, 35, and 37; and claims 1, 5, 6, 9, 23, 27, 29-31, 33, 36, 38, and 43 were amended.

Priority

4. Applicant's amendment of the specification to refer to the parent applications is noted.

Claim Rejections - 35 USC § 101

5. **(Prior Rejection- Withdrawn)** Claim 32 was rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process. In view of the cancellation of the claim, the rejection is withdrawn.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **(Prior Rejection- Withdrawn)** Claims 1-6, 10, 14-22, 28-32, 35, 36, and 43 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In view of the amendments to the claims, the rejection is withdrawn.

8. **(New Rejection- Necessitated by Amendment)** Claims 33, 36, 38-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 33 is treated as representative. This claim is drawn to a kit comprising a therapeutically effective amount of interferon in combination with ribavirin as a slow-release formulation comprising less than 400 mg per day of ribavirin. The claim is rejected because it is not clear how a slow-release formulation comprising "less than 400 mg per day of ribavirin." It would appear to be more precise to say that the formulation - - releases less than 400 mg per day of ribavirin- -.

Claim Rejections - 35 USC § 102

9. **(Prior Rejection- Withdrawn)** Claims 1-4, 10, 14-25, 28, 32-35, 39-43 were rejected under 35 U.S.C. 102(b) as being anticipated by Ganguly et al. (WO 00/23455). In view of the amendments to the claims, the rejection is withdrawn.

(Prior Rejection- Withdrawn) Claims 1, 2, 10, 14-17, 18, 20, 32, and 43 were rejected under 35 U.S.C. 102(b) as being anticipated by McHutchison et al. (New Eng J Med 339:1435-92). In view of the amendments of the claims requiring that ribavirin is provided in a dose of less than 400 mg per day, the rejection is withdrawn.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. **(Prior Rejection- Maintained)** Claims 1-4, 7-28, 32-35, 37-43 were rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ganguly et al. (supra). The rejection is withdrawn from cancelled claims 2-4, 7, 8, 24-2628, 32, 34, 35, and 37.Claim 1 has been amended to incorporate the limitations of (now cancelled) claims 2-4, and 7. The rejection is maintained as an obviousness rejection of claims 1, 9-23, 27, 33, and 38-43 over the teachings of Ganguly as previously described.

Applicant provides three arguments in traversal of the rejection.

First, the Applicant asserts that the reference fails to teach or suggest the use of less than 400 mg of ribavirin per day in a slow-release formulation. This argument is not found persuasive. As was indicated in the prior action, the reference teaches the co-administration of ribavirin, particularly in doses of 200-1600 or 400-800 mg/day or of above 1-30 or 4-15 mg/kg/day. Page 34. Because the ranges disclosed by the reference overlap with those of the present claims the teachings of the reference render obvious the claimed invention. Moreover, the reference also teaches that the dosages may vary based on several factors (page 39). Thus, it would have been obvious to those of ordinary skill in the art to have optimized the treatment for patients to arrive at dosages within the provided ranges. Additionally, it was also previously noted that the reference teaches the use of slow release formulations (e.g., by suppository and by sustained release formulation). These teachings therefore suggest the use of dosages that may be of less than 400 mg/day, and the administration of such through slow-release formulations.

Applicant notes that the reference "is not really instructive regarding the use of slow-release formulations of ribavirin." However, the Applicant does not assert that the use of such formulations was unknown in the art, and that further instruction would be required in order to use such formulations. The point of the assertion is therefore unclear, and is not found persuasive.

Applicant also asserts that the reference to administration of "both of the medicaments suggests the use of the combination therapy in a sustained release." It appears that this is an assertion that the reference teaches that both medicaments would be present in the sustained release formulation. This argument is not found persuasive. First, it is noted that most of the rejected claims fail to require that the interferon is separately administered from the ribavirin. Second, the reference indicates that the ribavirin may be administered "concurrently" with the interferon. Page 34. In view of such teachings, the indication on page 35 that other types of formulations may be used for "both medicaments" would have suggested to those of ordinary skill in the art that such "other formulations" may apply to the two medicaments together or separately. As the reference already suggests the separate but concurrent administration of the drugs, it would have been apparent to those of ordinary skill in the art that different administration formulations may be applied to the different drugs. Applicant's arguments with respect to the dosages and formulations of the drugs are therefore not found persuasive.

The second argument is an assertion that the reference does not teach that use of a slow-release form of ribavirin in a dose of less than 400 mg/day results in a selective anti-viral effect in the liver. However, it is noted that the response indicates only that the claimed invention "is

based in part of the inventor's **proposal**" that such administration provides the indicated beneficial results. Response, page 8 (emphasis added). I.e., the Applicant is asserted unexpected results over the teachings of the prior art. However, it is noted that no actual evidence that such beneficial results are achieved have been provided. It is noted that the MPEP indicates that, where a prima facie case of obviousness is established, "the failure to provide rebuttal evidence is dispositive." See, MPEP 716.01(a). The MPEP also indicates that objective evidence of non-obviousness, such as an assertion of unexpected results, must be factually supported by proof. See e.g., MPEP 716.01(c). No such evidence is present in the present application. The application provides no experimental results indicating that the claimed method of administering a low dose of ribavirin, in any formulation or mode of administration, provides any results different or superior to those achieved by administration of ribavirin at other doses or through other modes of administration. Nor is any such evidence relied upon or referred to in the arguments of the Response. In view of the absence of evidence that such unexpected results are achieved, the Applicant's assertion that the reference does not refer to such benefits is not found persuasive.

Finally, the Applicant also asserts that the reference does not "recognize that the effects relating to systemic administration of ribavirin may be avoided by using a slow-release composition of ribavirin in an oral dose or less than 400 mg..." As with the assertion of selective anti-viral effects, neither the Response nor the application provides any evidence of such benefits are found. The application provides only an argument that the Applicant expects such benefits to be present, without presenting any evidence that such benefits would in fact be recognized. In

view of the absence of such evidence of unexpected results, the argument is not found persuasive.

For the reasons above, and the reasons of record, the rejection is maintained.

12. **(Prior Rejection- Maintained)** Claims 5, 6, and 36 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ganguly as applied to claims 1-4, 7-28, 32-35, 37-43 above, and further in view of Wong et al. (U.S. 6,120,803). Applicant traverses the rejections on the basis that Wong does not teach the doses of ribavirin required by the present claims. The traversal makes no reference to the teachings of Ganguly. Thus, the argument is an argument against the references individually, where the rejection is based on a combination of references. It has been held that one cannot show nonobviousness by attacking references individually in such situations. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The argument is therefore not found persuasive.

The Applicant also asserts that the claimed method is obvious only "once the principle of liver selective therapy is recognized." This argument is not found persuasive for the reasons indicated with respect to the rejection over Ganguly above. In particular, the reference renders obvious the administration of ribavirin in does of 200-400 mg/day and in slow-release formulations. Moreover, the arguments regarding the unexpected benefits of the claimed method are also not found persuasive for the reasons indicated above.

The rejection is therefore maintained for the reasons above, and the reasons of record.

13. **(Prior Rejection- Maintained)** Claims 29-31 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ganguly as applied to claims 1-4, 7-28, 32-35, 37-43 above, and further in view of the teachings of Wong (supra) and Brass et al. (US 6849524). No argument is made specifically addressing this rejection. The arguments presented with respect to the rejections over Ganguly, and of Ganguly in view of Wong were not found persuasive for the reasons above. Those arguments are therefore also not found persuasive with respect to this rejection. The rejection is therefore maintained for the reasons above, and the reasons of record.

Double Patenting

14. **(New Warning- Necessitated by Amendment)** Applicant is advised that should claim 1 (as amended) be found allowable, claim 23 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

The only difference between the claims is a recital of desired functional results in claim 1. Such results would be inherent to the performance of the method of claim 23, which reads on an identical method of treating a viral-infection.

Conclusion

15. No claims are allowed.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZACHARIAH LUCAS whose telephone number is (571)272-0905. The examiner can normally be reached on Monday-Friday, 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Zachariah Lucas/
Primary Examiner, Art Unit 1648